

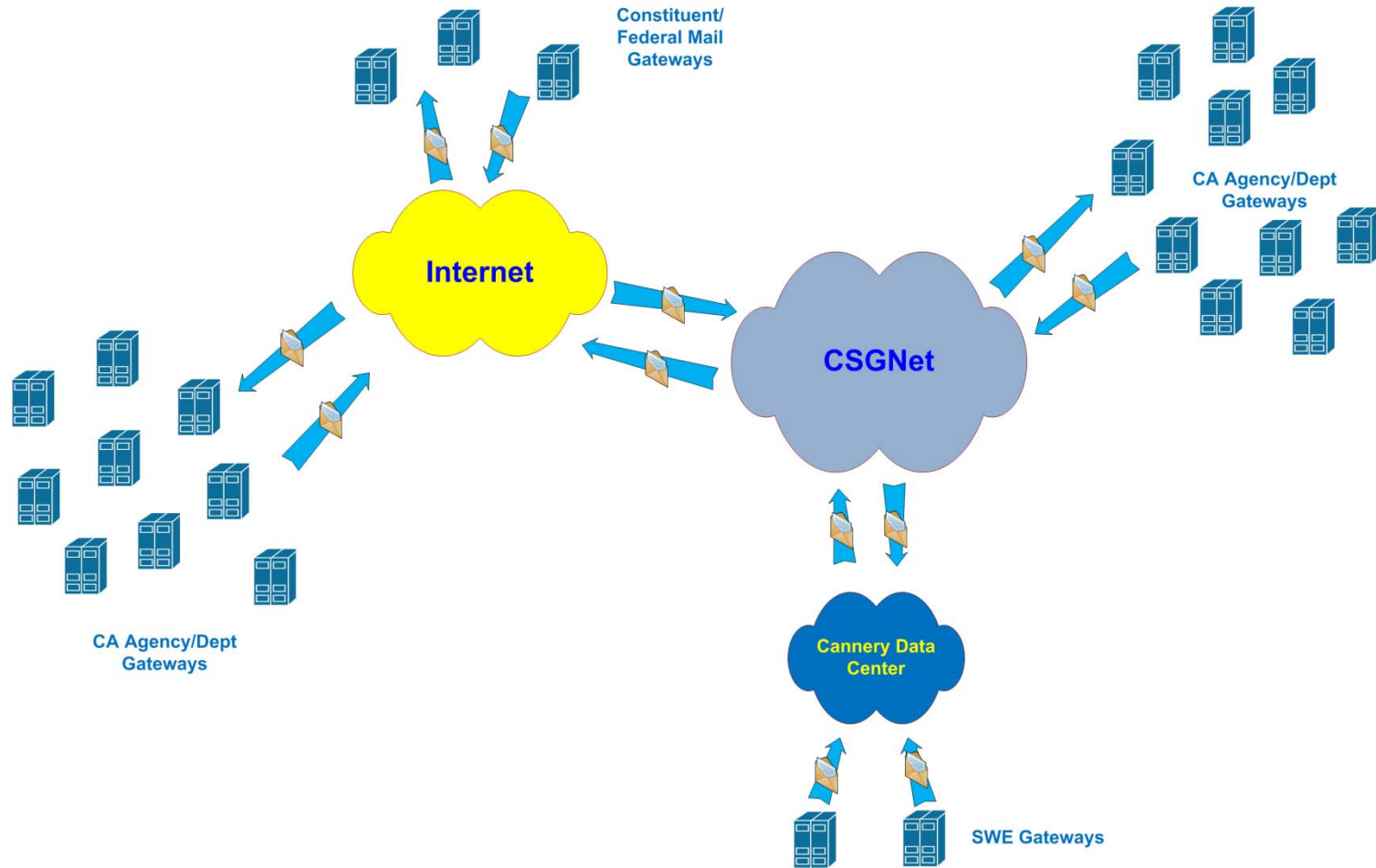
E-Hub Design

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Discussion Topics

- ▶ Existing Environment
- ▶ Design Objectives
- ▶ Design Assumptions/Requirements
- ▶ Design Alternatives – Private, Cloud, Blended
- ▶ Points to Consider

Existing Environment



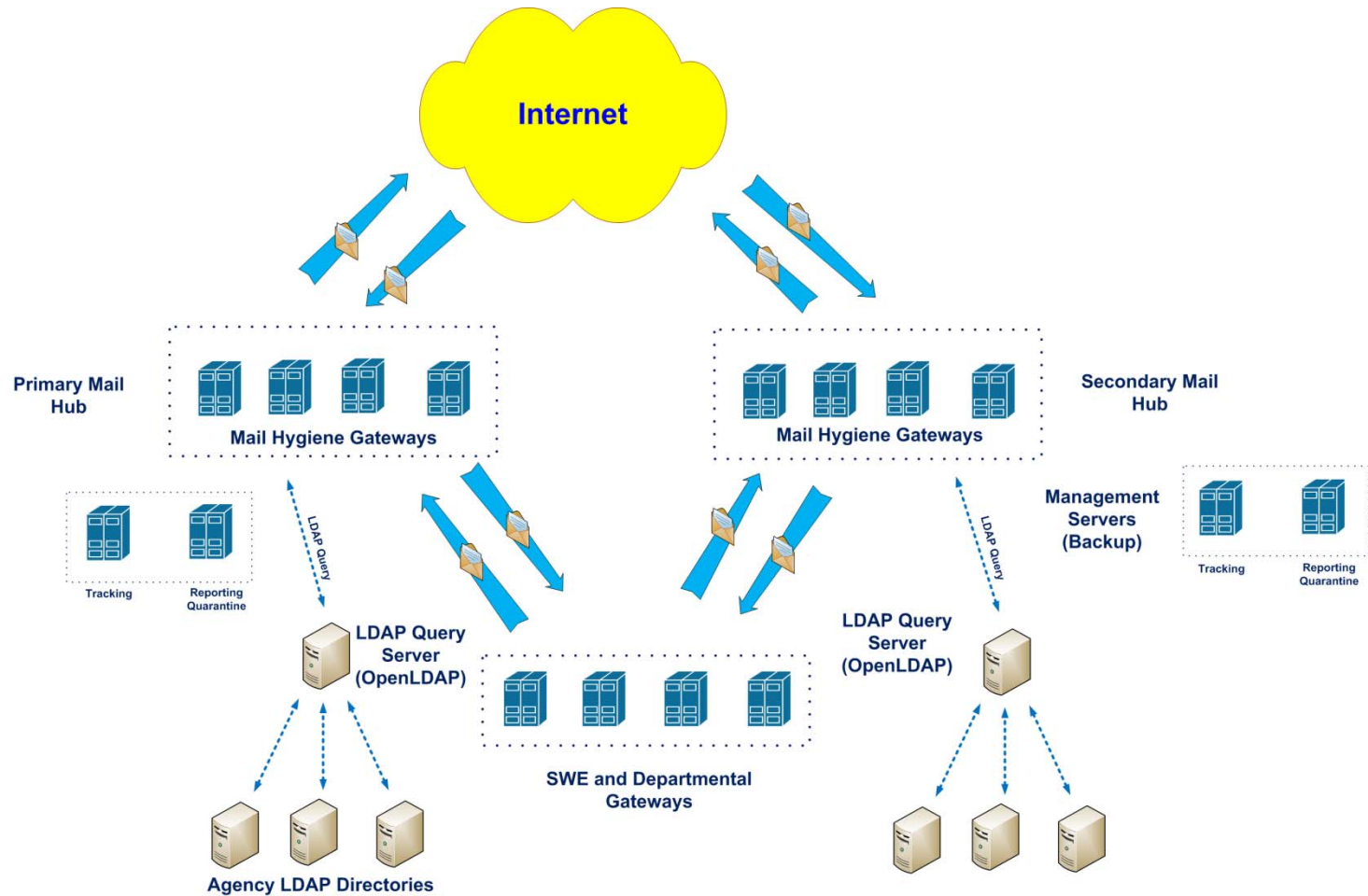
Design Objectives

- ▶ Secure and protect State of California Internet E-mail
- ▶ Inbound/Outbound/Interdepartmental E-mail
- ▶ Provide mail hygiene services
- ▶ Improve overall Internet e-mail availability
- ▶ Support implementation of additional capabilities
- ▶ Improved Incident Handling
- ▶ Provide departmental granularity
 - Policy/Administration/Features

Assumptions and Requirements

- ▶ Support ~150,000 Mailboxes
- ▶ Provide hardened SMTP hygiene services
 - Anti-spam/Anti-virus scanning
 - Inbound recipient verification
 - 'Plug-in' other services
- ▶ Provide 99.9% availability
- ▶ Messages queued less than 5 minutes
- ▶ 50K average message size
- ▶ 500K messages/hour peak volume
- ▶ Gateway to gateway encryption

Private Design Topology



Private Design Discussion

▶ Advantages

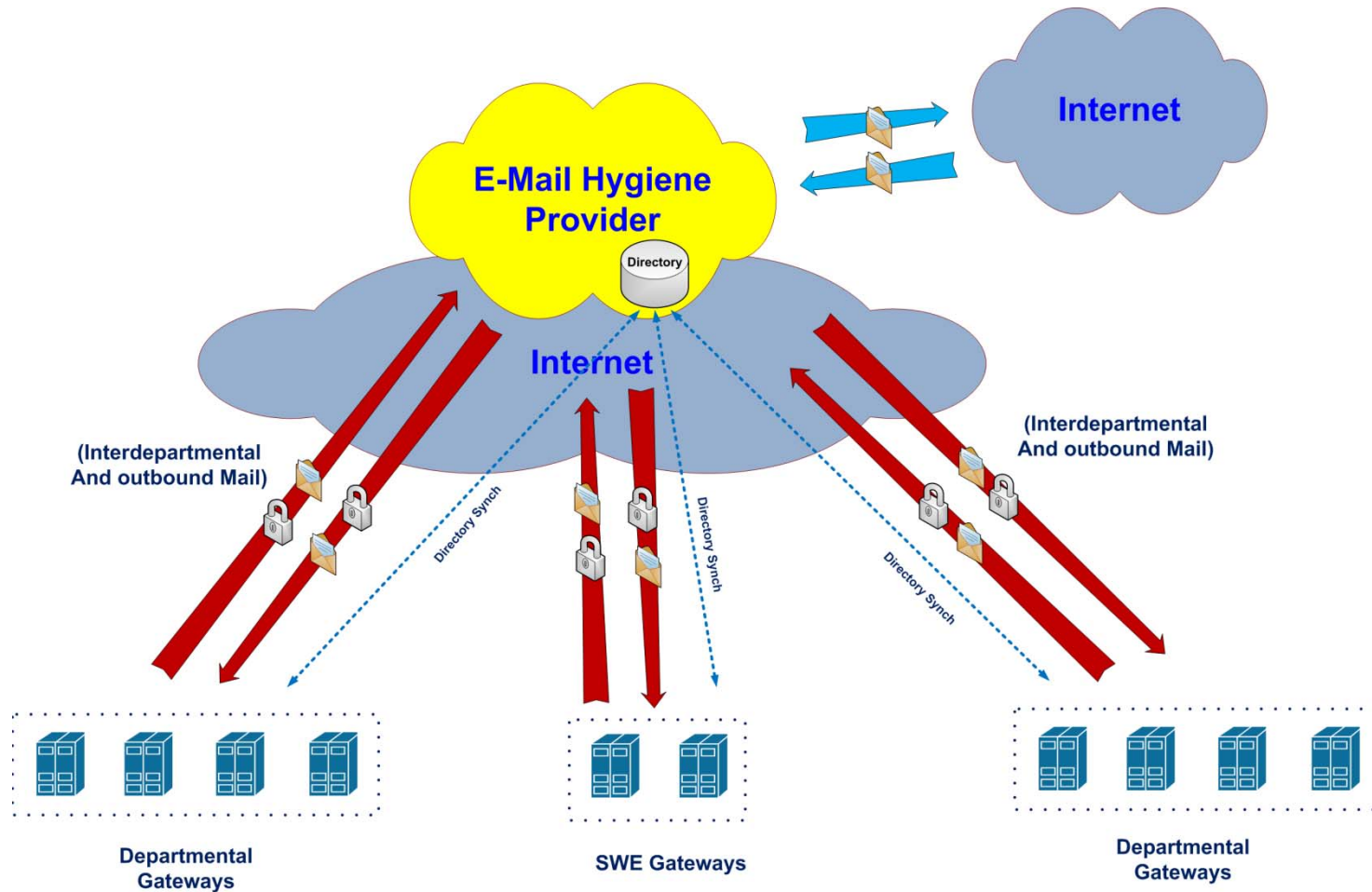
- Standardized mail hygiene platform
- Spam is filtered once
- Reduced network traffic
- Consolidates E-mail traffic for central policy compliance
- Allows plug in of additional services such as encryption

Private Design Discussion

▶ Disadvantages

- Many moving parts
- Integration of NMS and processes
- Tech refresh cycle
- Directory integration
- Initial implementation effort
- Level of granular policy administration varies on vendor

Cloud Design Topology



Cloud Design Discussion

► Advantages

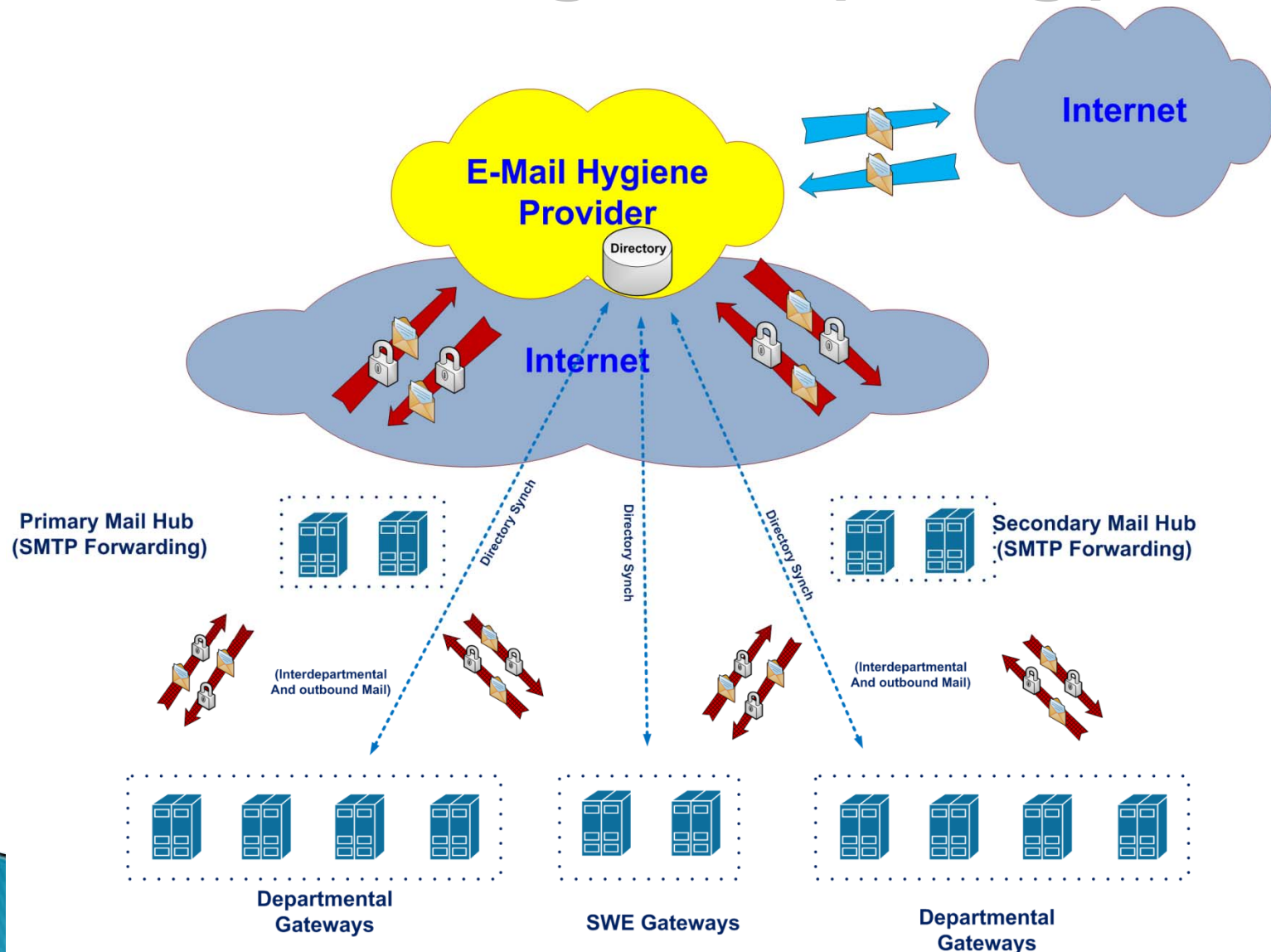
- Simple licensing model
- Very few moving parts
- Standardized mail hygiene platform
- Service Level Agreements
- Provider's core business
- Mail retention during outages
- Scale/Capacity/Tech Refresh
- Rapid implementation

Cloud Design Discussion

▶ Disadvantages

- E-mail traffic is not consolidated
- Features such DLP or encryption are dependent on Provider's offerings and roadmaps (DLP/encryption)

Blended Design (Topology)



Blended Design Discussion

▶ Advantages

- Standardized mail hygiene platform
- Spam is filtered once
- Consolidates E-mail traffic
- Allows plug in of additional services such as encryption
- Less capacity required than private solution

▶ Disadvantages

- Many moving parts = Increased complexity
- Higher costs – Gateways plus Provider charges
- Support model – Who's fault is it?

Points to Consider

- ▶ General requirements
- ▶ Gateway requirements/features
- ▶ Implementation
- ▶ Management
- ▶ Process

Summary

- ▶ Existing Environment
- ▶ Design Objectives
- ▶ Design Assumptions/Requirements
- ▶ Design Concepts
- ▶ Points to Consider